

INTERNATIONAL SEARCH REPORT

International Application No
PCT/GB2005/000950

A. CLASSIFICATION OF SUBJECT MATTER
IPC 7 B60H1/00 B60H1/32 F28D1/04

According to International Patent Classification (IPC) or to both national classification and IPC

B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)

IPC 7 B60H F28D

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practical, search terms used)

EPO-Internal, WPI Data, PAJ

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
A	US 4 190 105 A (DANKOWSKI, GERHARD) 26 February 1980 (1980-02-26) column 5, line 54 - column 8, line 20; figure 4	1-13
A	EP 0 859 209 A (ZEXEL CORPORATION) 19 August 1998 (1998-08-19) the whole document	1-13
A	US 6 189 604 B1 (YAMAUCHI YOSHIYUKI ET AL) 20 February 2001 (2001-02-20) columns 4-6; figures 2,6	1-13



Further documents are listed in the continuation of box C.



Patent family members are listed in annex.

* Special categories of cited documents:

- *A* document defining the general state of the art which is not considered to be of particular relevance
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- *O* document referring to an oral disclosure, use, exhibition or other means
- *P* document published prior to the International filing date but later than the priority date claimed

- *T* later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention
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- *Y* document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art.
- *&* document member of the same patent family

Date of the actual completion of the international search

8 June 2005

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21/06/2005

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Information on patent family members

International Application No

PCT/GB2005/000950

Patent document cited in search report		Publication date	Patent family member(s)	Publication date
US 4190105	A	26-02-1980	US 4063431 A	20-12-1977
			JP 53040457 A	13-04-1978
			US 4138857 A	13-02-1979
<hr/>				
EP 0859209	A	19-08-1998	JP 10073388 A	17-03-1998
			JP 10111086 A	28-04-1998
			JP 10197174 A	31-07-1998
			EP 0859209 A1	19-08-1998
			CN 1199458 A	18-11-1998
			WO 9809124 A1	05-03-1998
<hr/>				
US 6189604	B1	20-02-2001	JP 2000203250 A	25-07-2000
			DE 10001628 A1	20-07-2000
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